DOCUMENT RESUME

ED 344 883 SP 033 800

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TITLE Cooperative Learning in the Teacher Preparation Course.
PUB DATE Feb 92
NOTE 6p.; Paper presented at the Annual Meeting of the Association of Teacher Educators (72nd, Orlando, FL, February 15-19, 1992).
PUB TYPE Speeches/Conference Papers (150) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Attitude Measures; *Cooperative Learning; Education Majors; Higher Education; *Instructional Effectiveness; *Learning Strategies; *Preservice Teacher Education; Required Courses; *Student Attitudes; *Teaching Methods; Undergraduate Students
IDENTIFIERS *Jigsaw Method

ABSTRACT

This study was conducted to introduce preservice teachers to cooperative learning through direct experience with the strategy. Participants (N=85) consisted of freshmen and sophomores enrolled in a course required for teacher certification. During the first 6 weeks, instruction occurred through traditional lecture methods and at midterm, a jigsaw structure was implemented. Students were assigned to groups and asked to teach three topics following discussion of content and teaching strategies with group members. Following this cooperative learning experience, a Likert scale was administered and students were also asked to complete two open-ended questions with respect to the strengths and weaknesses of cooperative learning. Results indicate that a majority of respondents saw cooperative learning as a positive experience increasing social skills and academic gains. However, since many students indicated a desire for more traditional lecture methods, it is suggested that cooperative learning not replace traditional instruction, but rather be utilized as a supplement to effective existing strategies. (LL)

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COOPERATIVE LEARNING IN THE TEACHER PREPARATION COURSE

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A paper presented at the annual meeting of the Association of Teacher Educators, Orlando, Florida, February 15 - 19, 1992.

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Introduction:

Cooperative learning has been clearly demonstrated to be a highly effective strategy in promoting achievement and social functioning. Yet, implementation and study at the collegiate level appears to have been limited. Our purposes in the present study were to introduce preparing teachers to cooperative learning through direct experience with the strategy in three semester sections of a 200 level Educational Psychology course. Additionally, use of the jigsaw structure was chosen as means to offer a limited teaching experience.

Methodology:

Participants included eighty-five students, primarily freshman and sophomores, enrolled in a required course for teacher certification. During the first six weeks, instruction occurred primarily through traditional lecture methods and simulations. At midterm, a jigsaw structure was implemented. (Slavin 1985) Students were assigned to "teaching/learning" groups, and materials to be taught were distributed. "Expert" groups consisting of one member from each "teaching/learning" group with a corresponding topic met to discuss content and teaching strategy. Each class member was asked to teach three distinct topics and thus, met in an expert group and instructed in a teaching/learning group three times

Because individual accountability and the formation of group goals are essential components of effective group instruction, quizzes over assigned topics were administered after each cooperative learning session. Students were also informed that they would be responsible for evaluating the preparedness and contributions of the student members in both their "teaching/learning" group and their "expert" group.

At the conclusion of the cooperative learning unit, approximately six weeks, a four item Likert scale was administered . Students were also asked to complete two open-ended responses: "I see the strengths of cooperative learning as. . . ." "I see the weaknesses of cooperative learning as. . . ."

Results:

Results from both the Likert scale items and the open-ended responses indicated cooperative learning, particularly the jigsaw structure as applied in a teacher preparation course to be highly effective. Eighty-four percent of the eighty respondents saw cooperative learning as a positive experience, specifically in that it allowed more involvement with class members. Sixty-eight percent believed they had made academic gains. If forced to choose between traditional lecture methods and cooperative learning, fifty-four percent of the participants noted their choice to be cooperative learning.

Question 1: Cooperative learning was a positive experience for me.

	Frequency	Percent
Strongly Agree:	17	21.3
Agree	50	62.5
Neutral/No opinion	5	6.3
Disagree	7	8.8
Strongly Disagree	1	1.3

Mean: 3.9
Std Dev: .862

Question 2: I made academic gains through the cooperative learning experience.

	Frequency	Percent
Strongly Agree:	11	13.8
Agree	44	55.
Neutral/No opinion	15	18.8
Disagree	8	10.
Strongly Disagree	2	2.5

Mean: 3.6
Std Dev: .925

Question 3: Cooperative learning helped me feel more involved with my classmates.

	Frequency	Percent
Strongly Agree:	38	47.5
Agree	37	46.3.
Neutral/No opinion	2	2.5
Disagree	2	2.5.
Strongly Disagree	1	1.3

Mean: 4.36
Std Dev: .76

Question 4: As a learner, if forced to make a choice, I would choose a cooperative learning method over a traditional lecture method.

	Frequency	Percent
Strongly Agree:	11	13.8
Agree	33	41.3
Neutral/No opinion	18	22.5
Disagree	17	21.3
Strongly Disagree	1	1.3

Mean: 3.45
Std Dev:1.01

In addition, an analysis of variance for gender revealed no significant differences.

Open ended responses to prompts indicated the strengths of cooperative learning to be:

Interaction with peers
Practical teaching experience in a non-threatening setting
Increased involvement resulting in greater retention, particularly of material taught by student
Exposure to variety in the classroom
Allowed experiences as both teacher and learner
Treatment of student as more than "empty vessel."
Exposure to a variety of teaching styles and opinions
Provided opportunity to try on various teaching behaviors

Weakness of the cooperative learning experience were seen as:

Frustration with unprepared group members
Less thorough coverage of content
Dominance by outspoken group members
Inadequate time for preparation and presentations

Discussion:

As in other levels, cooperative learning in a collegiate teacher preparation course is a powerful model for development of a positive climate, increased social skills and interdependence, and academic gain. That many students desire more traditional lecture methods wherein emphasis is placed on the instructor's expertise and interpretation of content, increases emphasis on the notion that cooperative learning should not replace traditional instruction,

but should supplement effective existing strategies. Particularly in the teacher preparation course, cooperative learning via the jigsaw structure offers students opportunities to deliberate on interpretation and presentation of content, "practice" teach for limited time periods, observe others and themselves as they risk new teaching and learning strategies, and cooperate for the benefit of the group. One student wrote: "We are students, not teachers. We don't have the skills, or in many cases the time to prepare what a good teacher will need." Her comment, although given in a critical vein, provides evidence for increased use of cooperative learning in teacher preparation courses. These students will shortly become teachers and must develop the aptitudes that accompany effective teaching behavior.

Additionally, student comments provided reinforcement for suggestions in the literature that a carefully planned experience with structured group goals, measures to assure individual accountability, and instruction in group roles and processes is critical for fruitful experiences.

Although not a panacea nor a substitute for other effective strategies, cooperative learning offers much to educators of all levels. Those at the higher levels would do well to incorporate cooperative structures within their courses. As one student noted: "Especially at the college level, interaction and participation between students is overlooked and lost."

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